

**Revision of Afrotropical species
of the *Philonthus peripateticus* species group
(Coleoptera: Staphylinidae: Philonthina)**

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Abstract. The *Philonthus peripateticus* species group (i.e., subgenus *Raucalius* sensu Tottenham, 1949) of the genus *Philonthus* Stephens, 1829 (Coleoptera: Staphylinidae) comprising seven species and one subspecies, is revised. Two new species are described: *Philonthus colius* sp. nov. and *P. dendroaspis* sp. nov. (both from Zambia); five species and one subspecies are redescribed: *P. katan-gaensis* Lévassieur, 1967, *P. lamtoensis lamtoensis* Lévassieur, 1967, *P. lamtoensis shamnesis* Hromádka, 2005, *P. madianus* Bernhauer, 1936, *P. peripateticus* Tottenham, 1949, and *P. rugulipennis* Tottenham, 1949. The male genitalia of all species are illustrated. A key to species of the *Philonthus peripateticus* species group is provided.

Key words. Coleoptera, Staphylinidae, Philonthina, *Philonthus peripateticus* species group, taxonomy, new species, key, Afrotropical region

Introduction

When TOTTENHAM (1949) described the subgenus *Raucalius* Tottenham, 1949, of the genus *Philonthus* Stephens, 1829, he justified the erection of the subgenus as follows: ‘In view of the peculiar structure of the aedeagus in this and preceding species, a peculiarity which is accompanied by similar differences in sculpture from the normal, I propose for these species a new subgenus *Raucalius* with *P. peripateticus* Tottenham, 1949 as its type.’ These arguments, however, are hardly sufficient to support a genus group name in a modern taxonomic sense. This is particularly true for a large genus such as *Philonthus* where the intraspecific relationships are only very marginally understood as yet from a phylogenetic point of view. I will not synonymize the subgeneric name but I will follow the current concept of using species groups instead. Therefore, I establish the *P. peripateticus* group (utilizing the name of the type species of Tottenham’s subgenus) for all species formerly combined in the subgenus

Raucalius. The members of this species group are known only from the Afrotropical region. They are mostly found in association with rotting substances and faeces of mammals. The species group currently comprises seven species, two of which are described here for the first time:

Philonthus colius sp. nov.

Philonthus dendroaspis sp. nov.

Philonthus katangaensis Levasseur, 1967

Philonthus lamtoensis lamtoensis Levasseur, 1967

Philonthus lamtoensis shamnesis Hromádka, 2005

Philonthus madianus Bernhauer, 1936

Philonthus peripateticus Tottenham, 1949

Philonthus rugulipennis Tottenham, 1949

Material and methods

The specimens studied are deposited in the following collections:

- BMNH The Natural History Museum, London, United Kingdom (Max Barclay and Martin Brendell);
 FMNH Field Museum of Natural History, Chicago, USA (James Boone);
 JJRC Jiří Janák collection, Rtyň nad Bílinou, Czech Republic;
 LHPC Lubomír Hromádka collection, Praha, Czech Republic;
 MNHN Muséum national d'Histoire naturelle, Paris, France (Thierry Deuve);
 NMPC National Museum, Praha, Czech Republic (Jiří Hájek).

A slash (/) is used to denote separate lines on locality labels of the type material examined; a double slash (//) is used to divide separate labels. All measurements were taken with stretched abdomen. In ratios mentioned in the descriptions, 20 units = 1 mm.

Results

Philonthus colius sp. nov.

(Figs. 1-6)

Type locality. North-west Zambia, 27 km north of Kasempa.

Type material examined. HOLOTYPE: ♂, 'ZAMBIA NW / 27 km N Kasempa / 10.12.2004, Snížek & Tichý lgt. [red oblong printed label]' (NMPC). PARATYPES: 1 ♂, same label data as holotype (JJRC); 1 ♂, 'ZAMBIA C: 10 km NE of Kapiri Mposhi / ATB Loungeenu / 23.12.2004, Snížek & Tichý lgt.' (JJRC); 1 ♀, 'ZAMBIA NW / 190 km / SW of Solwezi to Kasempa / 9.12.2004, Snížek & Tichý lgt.' (LHPC).

Description. Body length 10.5-11.3 mm (with stretched abdomen), length of fore body (to the end of elytra) 4.6-5.4 mm.

Colouration. Head and pronotum black, elytra and abdomen black-brown, clypeus along anterior margin and antennal sockets narrowly brown-yellow, maxillary and labial palpi brown-yellow, terminal palpomere yellow-brown, mandibles black, antennae brown-black, base of antennomere 2 yellow-brown, legs dark brown.

Head transverse (ratio 40 : 32), sides behind eyes straight to posterior angles. Eyes slightly projecting, about as long as temples (ratio 13 : 12). Four punctures between eyes, distance between medial interocular punctures about 4 times as large as distance between medial and

lateral interocular punctures. Temporal area and area along base with many smaller punctures. Posterior angles of head marked. Surface here and there with very irregular, almost indistinct microsculpture and in places intermixed with numerous microscopic dots, shiny.

Antennae stout, reaching posterior fourth of pronotum when reclined. Antennomeres 1-3 and 11 longer than wide, antennomeres 4-7 as long as wide, antennomeres 8-10 wider than long.

Pronotum as long as wide, sides straight and subparallel, anterior angles almost rectangular, posterior angles very broadly rounded, base nearly straight medially. Each dorsal row with one puncture in anterior half; each sublateral row with one puncture, situated behind level of puncture in dorsal row. Surface without microsculpture.

Scutellum very densely and coarsely punctate, punctures somewhat larger than eye-facets, distances between punctures very short. Setation dense, black.

Elytra vaguely wider than long (ratio 62 : 60), at base slightly wider than pronotum, widened posteriad. Punctuation similar to that on scutellum, punctures around suture almost contiguous in transverse direction. Surface between punctures without microsculpture. Setation grey.

Legs. Metatibia about as long as metatarsus (ratio 38 : 37), metatarsomere 1 as long as metatarsomeres 2-4 combined, metatarsomere 5 somewhat shorter than metatarsomeres 3-4 combined.

Abdomen wide, very slightly narrowed towards apex. First three visible abdominal tergites with two basal lines, elevated area between basal lines coarsely and densely punctate. Punctuation of all tergites very dense and somewhat finer than those on elytra. Setation similar to that on elytra.

Male. Protarsomeres 1-3 conspicuously dilated and sub-bilobed, each covered with modified yellow setae ventrally, protarsomere 4 distinctly narrower than preceding ones, without modified yellow setae ventrally. Sternite VIII (Fig. 5), sternite IX (Fig. 6), aedeagus with branches of paramere exceeding apex of median lobe by length of antennomere 11. (Figs. 1-4).

Female. Head less transverse. Protarsomeres 1-3 less dilated than those of male, each covered with modified pale setae ventrally, protarsomere 4 small.

Differential diagnosis. *Philonthus colius* sp. nov. is habitually very similar to *P. dendroaspis* sp. nov., from which it may be distinguished by the transverse head, with straight and parallel sides, and by the different shape of the aedeagus.

Etymology. The name of this species, a noun in apposition, is the Latin generic name of the African bar-breasted mouse bird *Colius striatus* (Gmelin, 1789).

Bionomics. Unknown.

Distribution. North-west Zambia.

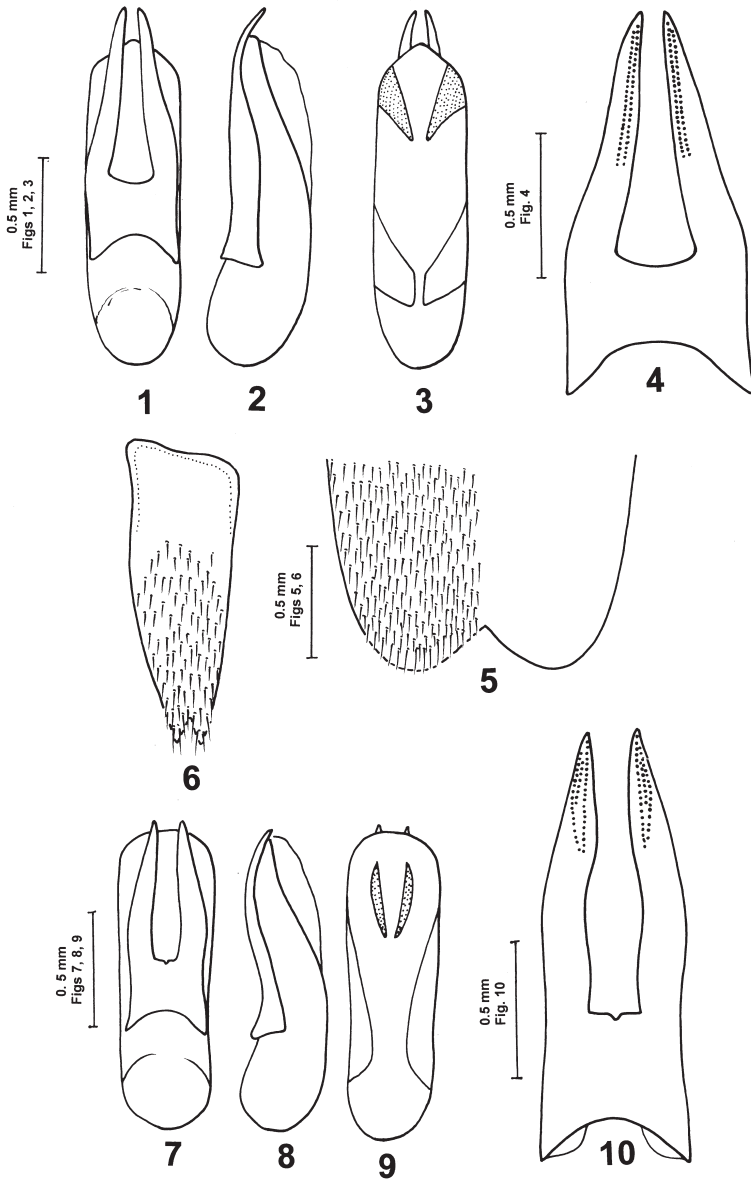
Philonthus dendroaspis sp. nov.

(Figs. 7-12)

Type locality. Central Zambia, 140 km north-east of Kapiri Mposh, 40 km south-west of Serenje.

Type material examined. HOLOTYPE: ♂, 'ZAMBIA C / 140 km NE of Kapiri Mposh / 40 km SW Serenje / 30.11.2004 / Snížek & Tichý lgt. [red oblong printed label]' (NMPC).

Description. Body length 10.2 mm (with stretched abdomen), length of fore body (to the end of elytra) 4.6 mm.



Figs. 1-10. 1-6 – *Philonthus colius* sp. nov.; 7-10 – *P. dendroaspis* sp. nov. 1-3, 7-9 – aedeagus: 1, 7 – ventral view, 2, 8 – lateral view, 3, 9 – dorsal view; 4, 10 – underside of paramere, with sensory peg setae; 5 – apical portion of sternite VIII, ventral view; 6 – sternite IX, ventral view.

Colouration. Black, clypeus along anterior margin and antennal sockets narrowly brown-yellow, maxillary and labial palpi brown, terminal palpomeres of either palpus somewhat paler, mandibles black, antennae black-brown, base of antennomere 2 brown-yellow, legs dark brown.

Head slightly wider than long (ratio 30 : 25), sides from posterior margins of eyes distinctly narrowed in straight line towards neck, posterior angles rounded. Eyes slightly projecting and vaguely longer than temples (ratio 10 : 9). Four punctures between eyes in straight line, distance between medial interocular punctures 4 times as large as distance between medial and lateral puncture. Temporal area with many punctures of different size. Surface without microsculpture.

Antennae stout, antennomeres 1-3 longer than wide, antennomeres 4-6 as wide as long, antennomeres 7-9 somewhat wider than long, antennomeres 10-11 of holotype missing.

Pronotum almost as long as wide (ratio 35 : 34), narrowed towards base in almost straight line; anterior angles almost rectangular; posterior angles markedly rounded. Each dorsal row in anterior half of pronotum with 1 puncture; each sublateral row with 1 puncture, situated behind level of puncture in dorsal row. Surface without microsculpture.

Entire scutellum very densely and coarsely punctate, punctures somewhat larger than eye-facets, arranged into transverse rows. Distance between punctures very short.

Elytra at shoulders somewhat wider than pronotum, hardly wider than long (ratio 45 : 43). Punctuation very dense, coarser than that on scutellum. Punctures larger than eye-facets. Distance between punctures very short, punctures around suture almost contiguous in transverse direction. Setation grey-brown.

Legs. Metatarsus slightly longer than metatibia (ratio 30 : 28), metatarsomere 1 as long as metatarsomere 5, metatarsomere 2 as long as metatarsomeres 3-4 combined.

Abdomen parallel-sided, slightly narrowed towards apex. Elevated area between two basal lines on first three visible tergites coarsely and densely punctate. Punctuation of visible tergites dense, somewhat finer than that on elytra, most of punctures of raindrop shape. Setation similar to that on elytra.

Male. Protarsomeres 1-3 markedly dilated and sub-bilobed, each densely covered with modified pale setae ventrally, protarsomere 4 triangular, distinctly narrower than preceding ones. Sternite VIII (Fig. 11), sternite IX (Fig. 12), aedeagus with branches of paramere exceeding apex of median lobe by length of protarsomere 4 (Figs. 7-10).

Female. Unknown to the author.

Differential diagnosis. *Philonthus dendroaspis* sp. nov. may be distinguished from the habitually similar *P. colius* sp. nov. by the narrower head and by the different shape of the aedeagus.

Etymology. The name of this species, a noun in apposition, is the Latin generic name of the African black mamba *Dendroaspis polylepis* (Günth, 1864).

Bionomics. Unknown.

Distribution. Central Zambia.

***Philonthus katangaensis* Levasseur, 1967**

(Figs. 13-18)

Philonthus (Raucalius) katangaensis Levasseur, 1967: 1625.**Type locality.** Democratic Republic of the Congo, Katanga, Kolwezi.**Type material examined.** HOLOTYPE: ♂, 'Kolwezi (Katanga) / xi.1953, bouse / Dr V. Allard / collection Louis Levasseur [white oblong label with red margin, handwritten]' (MNHN).**Redescription.** Body length 12.0 mm (with stretched abdomen), length of fore body (to the end of elytra) 5.8 mm.

Colouration. Head and pronotum black, strongly shiny, elytra and abdomen black-brown, antennae dark brown, maxillary and labial palpi and legs testaceous.

Head (Fig. 13) slightly transverse (ratio 33 : 30). Eyes as long as temples, slightly convex. Four punctures between eyes, distance between medial interocular punctures about four times as large as distance between medial and lateral interocular punctures. Temporal area with many punctures of different size. Posterior margin of head with scattered punctures. Surface with fine, hardly appreciable microsculpture.

Antennae long, reaching posterior margin of pronotum when reclined. Antennomeres 1-3 and 11 longer than wide, antennomeres 6-10 slightly serrate.

Pronotum vaguely longer than wide (ratio 40 : 38), almost parallel-sided; anterior angles rectangular, posterior angles markedly rounded. Right dorsal row with two punctures, left row with one puncture; each sublateral row with one puncture. Surface without microsculpture.

Scutellum very coarsely and densely punctate, punctures somewhat larger than eye-facets. Distance between punctures very short.

Elytra distinctly wider than long (ratio 58 : 47). Punctuation extremely dense and coarse, punctures coalescent here and there. Surface without microsculpture. Setation brown-yellow.

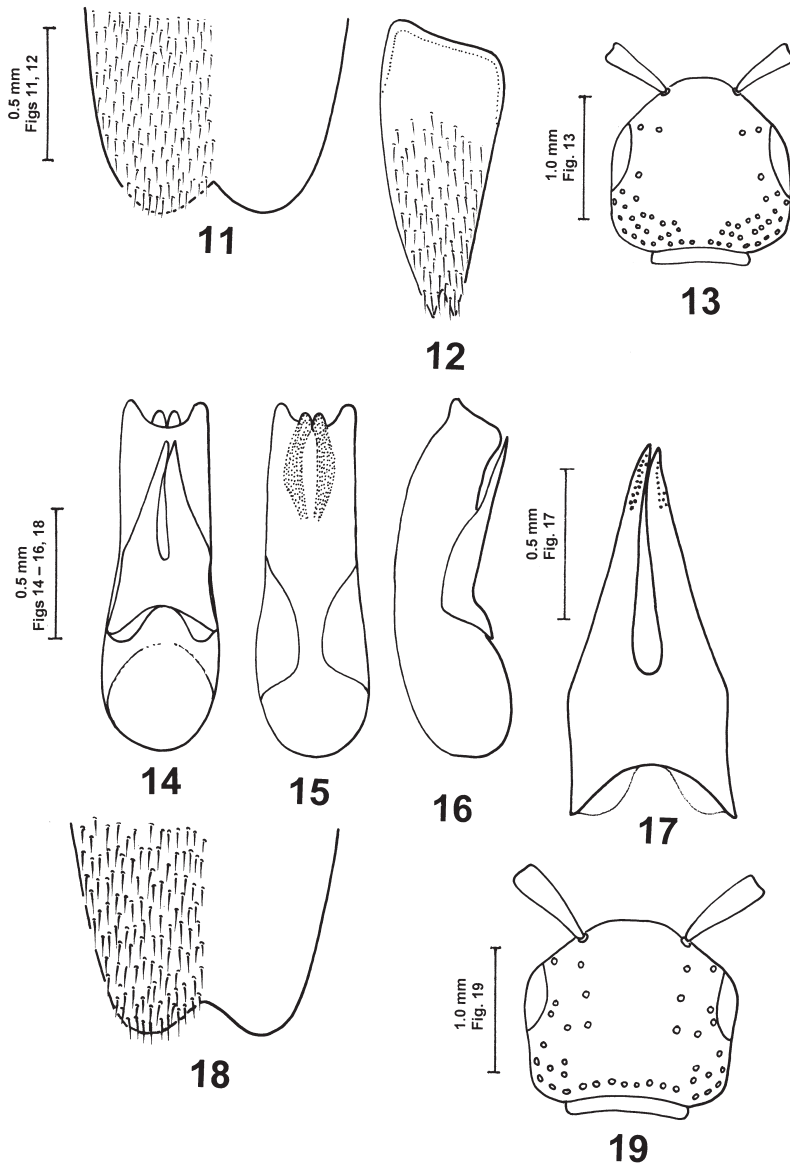
Legs. Metatibia as long as metatarsus. Metatarsomere 1 somewhat longer than metatarsomeres 2-3 combined, metatarsomere 5 somewhat shorter than metatarsomeres 3-4 combined.

Punctuation of abdomen comparable with punctuation of elytra. Tergites with traces of transverse microsculpture, more distinct on apex than on base. Elevated area between two basal lines on first three visible tergites very densely and coarsely punctate.

Male. Protarsomeres 1-3 markedly dilated and sub-bilobed, each covered with modified yellow setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Sternite VIII (Fig. 18), aedeagus with branches of paramere not reaching apex of the median lobe. (Figs. 14-17).

Female. Unknown to the author.

Differential diagnosis. *Philonthus katangaensis* may be distinguished from the most similar species, *P. lamtoensis*, by the different shape of the aedeagus.**Bionomics.** Found in cow excrement (LEVASSEUR 1967).**Distribution.** Democratic Republic of the Congo (former Zair) (LEVASSEUR 1967, HERMAN 2001).



Figs. 11-19. 11-12 – *Philonthus dendroaspis* sp. nov.; 13-18 – *P. katangaensis* Levasseur, 1967; 19 – *P. lamtoensis* Levasseur, 1967. 11, 18 – apical portion of sternite VIII, ventral view; 12 – sternite IX, ventral view; 13, 19 – head; 14-16 – aedeagus: 14 – ventral view, 15 – dorsal view, 16 – lateral view; 17 – underside of paramere, with sensory peg setae.

***Philonthus lamtoensis lamtoensis* Levasseur, 1967**

(Figs. 19-24)

Philonthus (Raucalius) lamtoensis lamtoensis Levasseur, 1967: 1626.**Type locality.** Ivory Coast, Toumodi env., Lamto.**Type material examined.** HOLOTYPE: ♂, 'Côte d'Ivoire, Lamto (Toumodi) 18.vi.1962. [white oblong label with red margin, handwritten]' (MNHN).**Redescription.** Body length 11.6 mm (with stretched abdomen), length of fore body (to the end of elytra) 5.7 mm.

Colouration. Head and elytra black, pronotum and abdomen black-brown, clypeus along anterior margin, maxillary and labial palpi, antennae and legs brown-yellow, all tibiae and femora somewhat darker.

Head (Fig. 19) markedly transverse (ratio 36 : 26), parallel-sided. Eyes slightly convex, hardly longer than temples (ratio 12 : 11). Posterior angles of head distinct, with a few bristles. Four coarse punctures between eyes, distance between medial interocular punctures about five times as large as the distance between medial and lateral interocular punctures. Temporal area with several punctures of different size. Surface without microsculpture, shiny.

Antennae relatively long, reaching third puncture of dorsal rows when reclined. Antennomeres 1-3 longer than wide, remaining antennomeres as long as wide.

Pronotum somewhat wider than long (ratio 45 : 42), parallel-sided, anterior angles rectangular, posterior angles markedly rounded. Each dorsal row with three almost equidistant punctures; each sublateral row with one puncture. Surface without microsculpture.

Scutellum very densely and coarsely punctate. Punctures larger than eye-facets, mostly coalescent. Setation black.

Elytra slightly wider than long (ratio 52 : 46), parallel-sided, insignificantly widened posteriad. Punctuation dense and coarse, punctures much larger than eye-facets. Distance between punctures very short. Setation greyish.

Legs. Metatarsus somewhat longer than metatibia (ratio 32 : 30). Metatarsomere 1 longer than metatarsomeres 2-4 combined, metatarsomere 5 as long as metatarsomeres 3-4 combined.

Abdomen wide, from third visible tergite slightly narrowed towards both base and apex. Punctuation between two basal lines on first three visible tergites coarse and dense. Punctuation of all tergites very dense, much finer than that on elytra. Size of punctures slightly larger than eye-facets. Setation brown-grey.

Male. Protarsomeres 1-3 moderately dilated, each covered with modified yellow setae ventrally, protarsomere 4 narrower than preceding ones. Sternite VIII (Fig. 24), aedeagus with branches of paramere narrowly separated medially, reaching apex of median lobe. (Figs. 20-23).

Female. Unknown to the author.

Differential diagnosis. *Philonthus lamtoensis lamtoensis* may be distinguished from *P. lamtoensis shamnesis* by the slender body and paler antennae and legs. It differs from the closely related *P. rugulipennis* and *P. katangaensis* by the different shape of the aedeagus, and from *P. rugulipennis* also by the paler antennae.**Bionomics.** Unknown.**Distribution.** Ivory Coast (LEVASSEUR 1967, HERMAN 2001).

***Philonthus lamtoensis shamnesis* Hromádka, 2005**

Philonthus lamtoensis shamnesis Hromádka, 2005: 113

Type locality. South Sudan, Shamne.

Type material examined. HOLOTYPE: ♂, 'Sudan mer. / Shamne / 15.x.1966 / Dr P. Štys lgt. [red oblong printed label]' (LHPC). PARATYPE: ♂, 'Sudan / Alel, 35km S of Yirol / 20.V.1954 / elephant dung / C.E. Tottenham collection B.M. 1974-587' (BMNH).

Differential diagnosis. Body length 11.3-12.1 mm, length of fore body (to the end of elytra) 5.8 mm. It may be distinguished from the nominotypical subspecies by its larger and more robust body, and by the black antennae and legs. *Philonthus lamtoensis lamtoensis* is slender with antennae and legs testaceous. Both subspecies share the same shape of the aedeagus.

Philonthus lamtoensis shamnesis is habitually very similar to *P. peripateticus*, but it differs by the slender antennae, the wider head and by the shape of the aedeagus.

Bionomics. Collected in elephant dung.

Distribution. South Sudan (HROMÁDKA 2005).

***Philonthus madianus* Bernhauer, 1936**

(Figs. 25-28)

Philonthus (Philonthus) madianus Bernhauer, 1936: 263.

Type locality. Angola, Ebanga.

Type material examined. HOLOTYPE: ♂, 'Angola, Miss. Sc. Suisse, 1932-1933 / Ebanga nov., / Chicago NHMus., M. Bernhauer Collection. // madianus Bernhauer, Typus. [ochre oblong label, handwritten]' (FMNH). PARATYPE: ♀, 'UGANDA, Madi, v.1927, / G. D. H. Carpenter, / Brit. Mus. Don. Marshall, / Chicago NHMus. M. Bernhauer Collection, // madianus Bernh. Cotypus. [ochre oblong label, handwritten]' (FMNH).

Redescription. Body length 11.9-12.2 mm (with stretched abdomen), length of fore body (to the end of elytra) 5.2-5.5 mm.

Colouration. Black, only clypeus along its anterior margin and antennal sockets narrowly yellow-brown; base of antennomere 2 and femora brown.

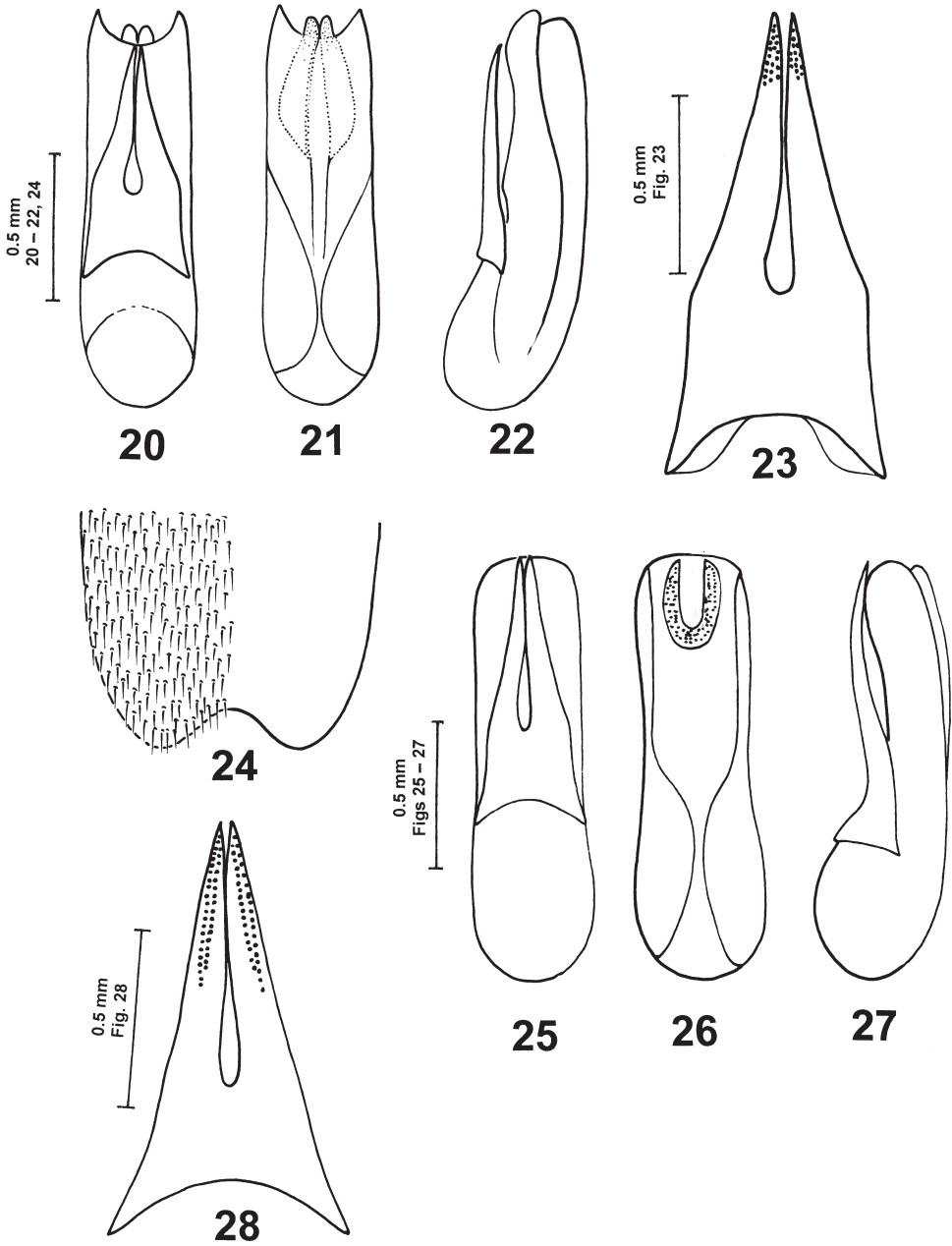
Head distinctly transverse, wider than long (ratio 39 : 36 in male, 39 : 33 in female), with well marked posterior angles, subparallel-sided, only medially slightly concave. Eyes almost as long as temples (ratio 14 : 15). Four coarse punctures between eyes, distance between medial interocular punctures about four times as large as distance between medial and lateral interocular punctures. Temporal area with many punctures of different size and with one long black bristle. Surface without microsculpture.

Antennae long, slightly widened towards apex, reaching posterior fifth of pronotum when reclined. Antennomere 1 distinctly shorter than antennomeres 2-3 combined, antennomere 2 slightly shorter than antennomere 3, antennomeres 4-10 of equal length, antennomere 11 somewhat longer than antennomere 10.

Pronotum as long as wide, subparallel-sided, anterior angles almost rectangular, with very apex obtusely rounded, posterior angles markedly rounded. Each dorsal row with two punctures, far away from each other; sublateral rows missing. Surface without microsculpture.

Scutellum coarsely and densely punctate, punctures somewhat smaller than those of elytra. Setae black.

Elytra distinctly wider than long (ratio 61 : 55), parallel-sided, vaguely widened posteriad, posterior margin relatively deeply cut out. Punctuation coarse and dense, punctures somewhat



Figs. 20-28. 20-24 – *Philonthus lamtoensis* Lévassour, 1967; 25-28 – *P. medianus* Bernhauer, 1936. 20-22, 25-27 – aedeagus: 20, 25 ventral view, 21, 26 – dorsal view, 22, 27 – lateral view; 23, 28 – underside of paramere, with sensory peg setae; 24 – apical portion of sternite VIII, ventral view.

larger than eye-facets, interspaces smaller than punctures. Surface without microsculpture, setation grey.

Legs. Metatibia as long as metatarsus. Metatarsomere 1 almost as long as metatarsomeres 2-4 combined, metatarsomere 5 longer than metatarsomere 2.

Abdomen from visible tergite V slightly narrowed towards both base and apex. Elevated area between two basal lines on first three visible tergites very densely and coarsely punctate. Punctuation of all tergites dense and slightly finer than that on elytra. Surface without microsculpture. Setation similar to those on elytra.

Male. Protarsomeres 1-3 strongly dilated, each densely covered with modified pale setae ventrally, protarsomere 4 distinctly narrower than preceding ones, heart-shaped. Aedeagus (Figs. 25-28).

Female. Protarsomeres 1-3 moderately dilated, slightly sub-bilobed, each covered with modified pale setae ventrally, protarsomere 4 scarcely dilated, distinctly narrower than preceding ones.

Differential diagnosis. *Philonthus madianus* is very similar to *P. peripateticus* but it differs by the slenderer and longer antennae, wider head and by the different shape of the aedeagus.

Remarks. It is not necessary to designate a lectotype in this case, because evidently Bernhauer clearly separated between 'Typus' and 'Cotypus', which translates to holotype and paratype of the modern concept.

Bionomics. Unknown.

Distribution. Angola, Uganda (BERNHAUER 1936, HERMAN 2001).

Philonthus peripateticus Tottenham, 1949

(Figs. 29-34)

Philonthus (Raucalius) peripateticus Tottenham, 1949: 303.

Type locality. Mozambique, Nyassa.

Type material examined. HOLOTYPE: ♂, 'Mozambique, NYASSA / B. M. Tottenham collection [oblong white label with red margin]' (BMNH).

Redescription. Body length 12.0 mm (with stretched abdomen), length of fore body (to the end of elytra) 5.9 mm.

Colouration. Head and pronotum black, elytra and abdomen black-brown, suture of elytra brown-black, maxillary and labial palpi brown, apex of terminal palpomere of maxillary palpi paler, mandibles dark brown, clypeus along anterior margin and antennal sockets narrowly yellow-brown, antennae black, base of antennomere 2 brown-yellow, femora black-brown, tibiae and tarsi black.

Head rounded, somewhat wider than long (ratio 36 : 34), sides behind eyes nearly straight. Eyes flat, as long as temples. Posterior angles rounded. Four punctures between eyes distance between medial interocular punctures, about 4 times as large as the distance between medial and lateral interocular punctures. Temporal area with many coarse punctures of different size, some punctures along base. Surface without microsculpture.

Antennae long and stout, widened to apex, almost reaching posterior margin of pronotum when reclined. Antennomeres 1-4 and 11 longer than wide, remaining antennomeres as long as wide.

Pronotum vaguely wider than long (ratio 37 : 35) sides straight and slightly converging anteriorly, posterior angles widely rounded. Each dorsal row with 2 coarse punctures, situated far from each other; puncture 1 at anterior half of pronotal length, puncture 2 at posterior half; each sublateral row with 2 punctures, puncture 1 situated at same level as puncture 1 of dorsal row, puncture 2 situated near lateral margin of pronotum. Surface without microsculpture.

Scutellum very densely and wrinkly punctured, punctures coalescent.

Elytra somewhat longer than wide (ratio 66 : 59), slightly widened posteriorly, very coarsely and densely punctured, punctures coalescent here and there. Setation brown.

Legs. Metatarsus as long as metatibia, metatarsomere 1 almost as long as metatarsomeres 2-3 combined, metatarsomere 5 as long as metatarsomeres 3-4 combined.

Abdomen wide, from third visible tergite slightly narrowed towards both base and apex. Elevated area between two basal lines on first three visible tergites very densely and coarsely punctate, punctures mostly drop-shaped. Setation similar to those on elytra.

Male. Protarsomeres 1-3 markedly dilated and sub-bilobed, each covered with modified yellow setae ventrally, protarsomere 4 distinctly narrower than preceding ones. Sternite VIII (Fig. 33), sternite IX (Fig. 34), aedeagus with branches of paramere not reaching apex of median lobe (Figs. 29-32).

Female. Unknown to the author.

Differential diagnosis. *Philonthus peripateticus* may be distinguished from the similar species *P. lamtoensis* by the stouter antennae and narrower head; from *P. madianus* by the stouter and shorter antennae, and the narrower head, and from both species by the different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Mozambique (TOTTENHAM 1949, HERMAN 2001).

Philonthus rugulipennis Tottenham, 1949

(Figs. 35-40)

Philonthus (Raucalius) rugulipennis Tottenham, 1949: 301.

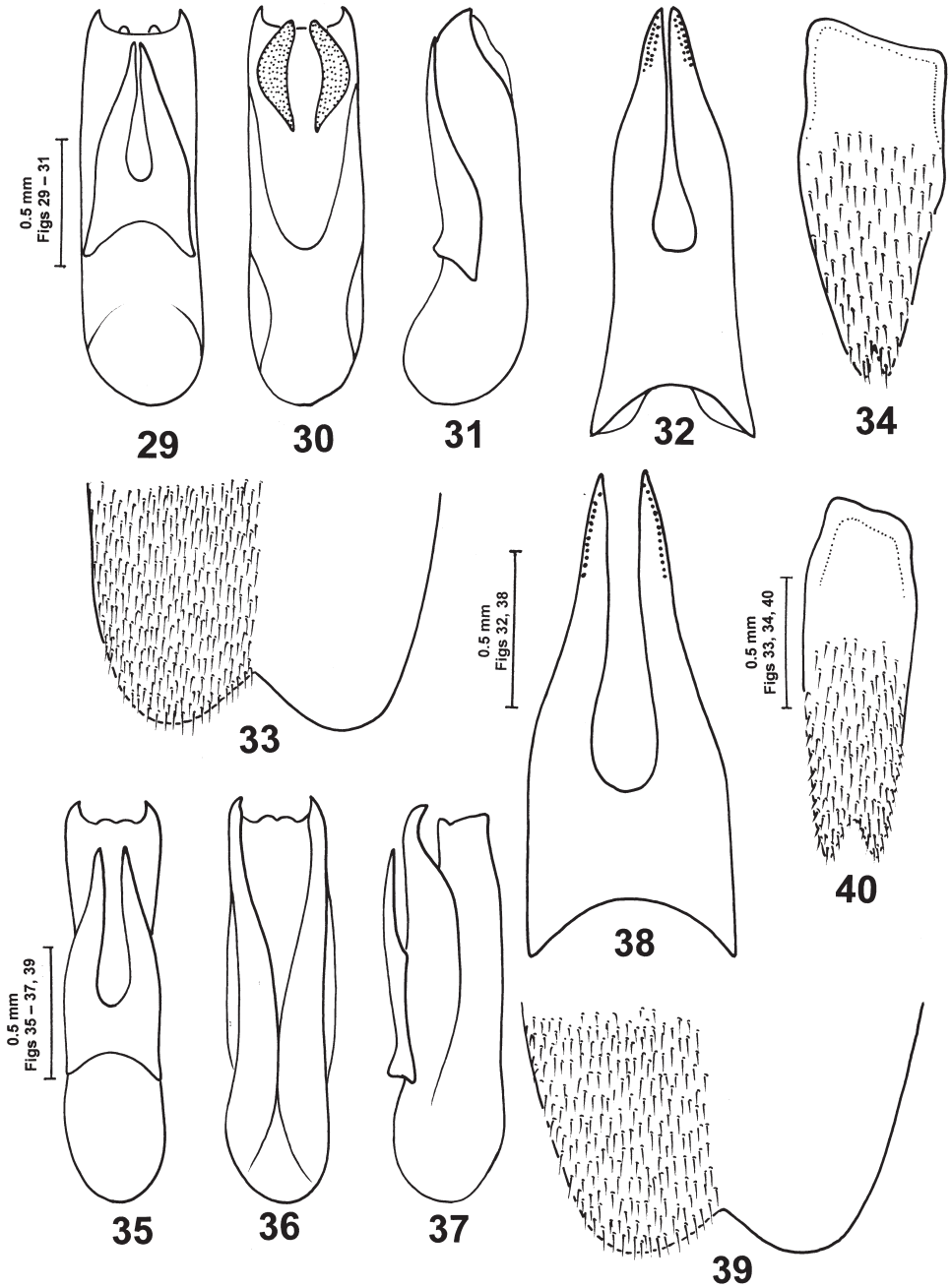
Type locality. Democratic Republic of the Congo (former 'Belge Congo'), Lulua, Kananga.

Material examined. ♂, ZAMBIA: 'N.W. Rhodesia, Kashitu, N of Broken Hill, xi.1914, H.C. Dollman, H.C. Dollman collection 1919-79 // *Philonthus rugulipennis* Bernhauer, labelled by Bernhauer as *Cotyplus* / Chicago NHMus M. Bernhauer collection' (FMNH). See note below.

Redescription. Body length 10.1 mm (with stretched abdomen), length of fore body (to the end of elytra) 5.4 mm.

Colouration. Head and pronotum black, elytra and abdomen black-brown, suture of elytra narrowly reddish, clypeus along anterior margin and antennal sockets narrowly brown-yellow, maxillary and labial palpi brown-yellow, apices of all palpomeres somewhat paler, antennae black-brown, antennomere 1, base of antennomere 2 and legs yellow-brown, tibiae and tarsi somewhat darker.

Head quadrate, somewhat wider than long (ratio 31 : 28), slightly narrowed posteriorly. Eyes about as long as temples (ratio 12 : 11), slightly convex. Four punctures between eyes, distance separating medial punctures about four times as large as distance separating medial punctures from lateral ones. Posterior margin and temporal area of head with numerous coarse punctures; one coarse puncture posteriorly of medial interocular puncture. Surface with very



Figs. 29-40. 29-34 – *Philonthus peripateticus* Tottenham, 1949; 35-40 – *P. rugulipennis* Tottenham, 1949. 29-31, 35-37 – aedeagus: 29, 35 – ventral view, 30, 36 – dorsal view, 31, 37 – lateral view; 32, 38 – underside of paramere, with sensory peg setae; 33, 39 – apical portion of sternite VIII, ventral view; 34, 40 – sternite IX, ventral view.

fine, transverse wavy microsculpture, intermixed with numerous microscopic dots here and there.

Antennae relatively long, reaching hind fifth of pronotum, when reclined; antennomere 1 as long as antennomeres 10-11 combined, antennomeres 2 and 3 equal in size.

Pronotum about as long as wide (ratio 36 : 35), parallel-sided; anterior angles almost rectangular, distinctive; posterior angles markedly rounded. Each dorsal row with 3 punctures; each sublateral row with 2 punctures. Surface with very fine microsculpture of transverse waves, intermixed with numerous microscopic dots here and there.

Scutellum with very coarse, dense and granular punctation; punctures mostly coalescent.

Elytra wider than long (ratio 49 : 43), slightly widened posteriad, with very coarse, granular and dense punctation, punctures mostly coalescent; setation dark brown.

Legs. Metatarsus as long as metatibia, metatarsomere 1 somewhat longer than metatarsomere 5, metatarsomere 2 as long as metatarsomeres 2-3 combined.

Abdomen from visible tergite 5 slightly narrowed towards both base and apex. Elevated area between two basal lines on first three visible tergites coarsely punctate. Punctation somewhat finer than that on elytra; transverse interstices between punctures usually smaller than diameters of punctures; punctures coalescent here and there. Surface without microsculpture. Setation similar to that on elytra.

Male. Protarsomeres 1-3 markedly dilated and sub-bilobed, each covered with modified yellow setae ventrally, protarsomere 4 slender. Sternite VIII (Fig. 39), sternite IX (Fig. 40), aedeagus with branches of paramere widely separated medially (Figs. 35-38).

Female. Unknown to the author.

Differential diagnosis. *Philonthus rugulipennis* may be distinguished from the two most similar species *P. lamtoensis* and *P. katangaensis* by the darker antennae and by the different shape of the aedeagus.

Bionomics. Unknown.

Distribution. Democratic Republic of the Congo, Zambia (TOTTENHAM 1949, HERMAN 2001).

Remarks. The holotype of this species is preserved in the Musée royal de l'Afrique centrale in Tervuren. I did not see the holotype. The redescription was done from a specimen ('Cotype') from the Bernhauer collection (FMNH). However, Bernhauer never described the species, therefore this specimen ('comparatype') does not have any type status.

Key to males of the *Philonthus peripateticus* species group

- 1 Branches of paramere reaching or exceeding apex of median lobe in ventral view. 2
- Branches of paramere not exceeding apex of median lobe in ventral view. 3
- 2 Branches of paramere exceeding apex of median lobe by length of antennomere 11 (Fig. 1). *P. colius* sp. nov.
- Branches of paramere exceeding apex of median lobe by length of protarsomere 4 (Fig. 7). *P. dendroaspis* sp. nov.
- Branches of paramere reaching apex of median lobe (Fig. 25). *P. madianus* Bernhauer, 1936

- 3 Legs from brown-yellow to yellow-brown. 4
 – Legs from black to black-brown. 6
 4 Antennae black-brown. *P. rugulipennis* Tottenham, 1949
 – Antennae brown-yellow. 5
 5 Branches of paramere reaching apex of median lobe (Fig. 20).
 *P. lamtoensis lamtoensis* Levasseur, 1967
 – Branches of paramere not reaching apex of median lobe (Fig. 14).
 *P. katangaensis* Levasseur, 1967
 6 Head distinctly wider than long (ratio 36 : 26).
 *P. lamtoensis shamnesis* Hromádka, 2005
 – Head rounded, vaguely wider than long (ratio 36 : 34).
 *P. peripateticus* Tottenham, 1949

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